Nutrition Needs for Older Adults: Protein



Commissioned by the National Resource Center on Nutrition & Aging; Written by: Katie Dodd, MS, RDN, CSG, LD, FAND

Introduction

Protein is a nutrient that plays an important role in the health of older adults. Protein is found in every single cell in the body and is essential for life¹. Protein supports good health, immunity, muscle maintenance, and physical function in older adults².

Nearly half of all protein in the body is found in muscle, and muscle mass decreases with age¹. This decline in muscle mass, known as sarcopenia, may increase the need for protein in older adults. Sarcopenia in older adults can lead to frailty, disability, loss of independence, and death³.

How Much is Needed?

The Recommended Dietary Allowance for older adults is the same as younger adults, though emerging research suggests older adults may indeed require more protein. Needs are based on weight and are the same for men and women.

Apricot

Recommended Dietary Allowances (RDA) for Protein¹:

Life Stage	Needs for Men and
Group	Women
19+ years	0.8 grams per kilogram body weight

Food Sources of Protein

Research suggests that protein requirements may be higher in older adults. Researchers recommend that older adults consume 1-1.2 grams of protein per kilogram body weight (one kilogram is about 2.2 pounds). Endurance and resistance training exercises are also advised to promote muscle health. The exception to this rule is for those with kidney disease ^{2,3}.

It's important to get the right amount of protein. Too little can cause malnutrition or muscle loss, which can lead to decreased physical function and independence and increased fall risk, hospitalization, and mortality². Too much can cause dehydration, and in those with kidney disease, can further kidney damage.

Food source Amount per serving Grams per serving Beef 3 ounces 24 24 Greek yogurt (low fat) 1 cup 22 Salmon 3 ounces Chicken 20 3 ounces 17 Lentils (cooked) 1 cup Almonds 0.3 cup 10 8 Milk (low fat) 1 cup 8 Quinoa (cooked) 1 cup 7 Chickpeas 0.5 cup 6 Egg 1 large Oatmeal (cooked) 5 1 cup 5 Spinach (cooked) 1 cup Green peas 0.5 cup 4 2 Avocado 0.5 cup

1 cup

Food Sources of Protein 4:

In addition to eating high protein food sources, the timing and distribution of protein throughout the day is important. Protein consumption should be spread out throughout the day with good protein sources at each meal ^{2,3}.

Some older adults are not able to get adequate protein through food alone and may require supplementation. It is important that older adults work with their health care team to determine whether supplementation is needed.

Strategies to Help Older Adults Optimize Intake Daily

The following strategies can help older adults optimize their intake of protein:

When Shopping:

- Purchase foods naturally high in protein, like meat, lentils, and eggs
- Read food labels for protein content

During Meal Preparation:

- · Include high protein foods at every meal throughout the day
- Breakfast is a good opportunity for protein through eggs and Greek yogurt
- Include meat, beans, and lentils throughout the week in menu planning

At the Table:

- Offer beverages high in protein, such as milk or milk-alternatives (e.g., soy milk, oat milk)
- · Provide high protein foods as snacks throughout the day



REFERENCES

- Institute of Medicine, Food and Nutrition Board. Dietary Reference Intakes for Energy, Carbohydrates, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. Washington, DC: National Academy Press, 2005. https://www.nap.edu/read/10490/ chapter/1. Accessed November 19, 2019.
- 2. Bauer J, Biolo G, Cederholm T, et al. Evidence-based recommendations for optimal dietary protein intake in older people: a position paper from the PROT-AGE Study Group. Journal of the American Medical Directors Association. 2013 Aug 1;14(8):542-59.
- 3. Deer RR, Volpi E. Protein intake and muscle function in older adults. Current opinion in clinical nutrition and metabolic care. 2015 May;18(3):248.
- 4. FoodData Central, U.S. Department of Agriculture, https://fdc.nal.usda.gov/. Accessed November 19, 2019.